

# Rica Esquivel

Virginia Beach, VA • [ricaannesquivel@vt.edu](mailto:ricaannesquivel@vt.edu) • (757) 818-3774 • [LinkedIn](#) • [Website](#)

## SKILLS

---

**Languages:** Python, SQL, R, Java, C, HTML, x86 Assembly

**Packages:** Scikit-Learn, XGBoost, Pandas, Numpy, NLTK, Gensim, Doc2Vec

**Methods:** NLP, Machine Learning

**Data & Cloud Platforms:** Snowflake, AWS (EC2 and S3), MySQL

**Data Visualization:** Seaborn, Matplotlib, Plotly, Dash

**Business:** PowerBI, Microsoft Excel, Asana

**Tools:** Git, Jupyter Notebooks

**Mathematics & Statistics:** Calculus (I, II, & III), Linear Algebra, Applied Combinatorics, Discrete Mathematics

## WORK EXPERIENCE

---

**Omni-Channel Ops Intern** – Tractor Supply Company, Brentwood TN May – August 2025

- Designed and deployed a XGBoost ML system in Snowflake (Snowpark, Snowflake ML API, Python, SQL) to predict and reduce store cancellation risk and improve fulfillment reliability across 2,300+ stores and 30K+ SKUS.
- Automated data ingestion, inference, and batch uploads within Snowflake for secure, scalable, and cloud-native deployment, minimizing data egress.
- Achieved an estimated **\$1.5M-\$3M annual revenue recapture** and developed a Power BI dashboard to monitor model performance and business impact.

**Data Science Intern** – HII Mission Technologies, Virginia Beach VA June 2024 – August 2024

- Developed a Random Forest model to predict maintenance durations, reducing equipment downtime and delays, a Doc2Vec-based recommendation system for maintenance personnel.
- Designed and deployed an interactive dashboard with 3D digital twin modeling to visualize sustainment health metrics and asset readiness.
- Demonstrated the operational value of predictive analytics and NLP to enhance mission readiness and streamline sustainment processes.

## PROJECTS

---

**Navy CVN Maintenance Dashboard** – Data visualization dashboard built using the Dash framework that employs digital twin concepts, visualizing US Navy CVN, powered by predictive analytics (ML), enabling data-driven decisions to optimize sustainment of Navy systems.

**Mealprep App** – Full-stack web application built in a team of 5 using MySQL database, ran using AWS EC2, where users can browse meal recipes, customize weekly eating habits, and share customized meals to other users using QR codes.

## CERTIFICATIONS

---

NVIDIA Introduction to Transformer-Based Natural Language Processing 2025

IBM Data Science Professional Certificate 2025

## EDUCATION

---

Virginia Polytechnic Institute and State University (Virginia Tech), Blacksburg VA Graduation: December 2025

Bachelor of Science: Computer Science

## AWARDS

---

Dean's List – Virginia Tech (2 semesters) Several

AFCEA Julie Walter Memorial Scholarship – AFCEA Educational Foundation August 2024

## LANGUAGES

---

English (Proficient)

Tagalog (Proficient)